## Al-FARABI KAZAKH NATIONAL UNIVERSITY

Higher school of Economics and Business Department of "Business technologies"

### FINAL EXAM PROGRAM OF THE DISCIPLINE

# PLS 4305 – Design of Logistics Systems

5B090900 - Logistics

Course - 4 Groups - English

2021

The final exam program is compiled by PhD, senior lecturer, A. K. Kozhakhmetova.

Considered and recommended at the meeting of Department of Business technologies

"19" November 2021 y., Protocol № 7

Head of Department \_\_\_\_\_ Akhmetova Z. B.

### Introduction

Exam process: <u>Written</u> Platform: <u>DLS Oqulyq</u> Format: <u>Synchronous</u>

The final exam will be held *in writing*. The student takes the exam on the online platform (*DLS Oqulyq*) by filling in the fields of answers to the questions of the automatically generated exam ticket. The student must form their *written response by directly entering the text into the system*. The *duration of the exam* is exactly *2 hours*. Each ticket contains *three questions* that need to be fully answered.

#### Students' guide

1. At the specified time, the student enters the site "app.oqylyk.kz".

2. The student receives a Username and password in the UNIVER IP.

3. Ticket Generation is performed automatically for each student.

4. The exam Begins with mandatory proctoring: you need a laptop or home computer with a webcam. If it is not available, you can use the smartphone camera, for example, with the "DroidCam client" application.

5. At the end of the exam, the student clicks the "Finish" button.

Clicking on the link below are possible to read in detail *the rules of passing the exam in the system Oqylyq* - <u>https://www.kaznu.kz/ru/22185/page/</u>

#### Content of topics included in the final exam:

1. The essence and principles of logistics.

2. Logistics management in an organization; Principles of logistics management. Methods applied for logistics management.

3. Strategic aspects of logistics management.

4. The concepts of production: "Just in time" and Kanban".

5. Quality control in logistics.

- 6. Modeling of logistics systems.
- 7. Distribution technologies in logistics.
- 8. Logistics service.

9. Global logistics management.

10. Current transport corridors.

- 11. Modern technologies in logistics.
- 12. Digitalization of logistics: trends and opportunities.

13. Information Logistics optimization.

#### Program topics used during the exam

1. *The essence and principles of logistics*: Fields of logistics. Functions and objectives of logistics. Design of logistics operations

2. Logistics management in an organization: Principles of logistics management. Methods applied for logistics management. Managing logistics systems.

3. *Strategic aspects of logistics management*: Types of logistics strategies. Description of strategies for system construction. Methods for creating logistics strategies.

4. *The concepts of production: "Just in time" and Kanban:* Description of production concepts. Advantages of Just in time concept. Applying Kanban concept.

5. *Quality control in logistics*: Principles of quality management in logistics. Tools for quality control. Quality control systems.

6. *Modeling of logistics systems*: Types of logistics models. Applying software models in logistics. Traditional models for logistics systems.

7. *Distribution technologies in logistics*: The role of distribution in designing of logistics systems. Distribution technologies.

8. *Logistics service*: Functions of logistics service. Types of logistics service. Comparing logistics service with service logistics.

9. *Global logistics management*: Principles of global logistics. Strategies for global logistics. Global logistics steps.

10. *Current transport corridors: challenges and future technologies:* Traditional modes of transport. Description of transport corridors. Features of domestic transport corridors.

11. *Modern technologies in logistics*: Applying foreign technologies of logistics. Transfer and adaptation of technologies. Types of logistics technologies.

12. Digitalization of logistics: trends and opportunities: Digital technologies of logistics system. Logistics system design by using digital tools. Modern digital technologies of logistics.

13. *Information Logistics optimization*: Description of information in logistics. Types of information flow. Methods of managing logistics information flow.

## Criteria for assessing student compliance / non-compliance

For each question in the ticket, from **30 to 40 points** are awarded (*1 and 2 questions with 30 points each, as well as 40 points for 3 questions*). A score of 100 points (excellent) is given if the student is fluent in the material of the examination test, supports the answer with knowledge of sources on the topic of the question, sets out in writing alternative scientific versions and hypotheses on the main problems of the ticket topic, indicates places where you can reasonably object to the knowledge reproduced in the mandatory literature; clearly presents the weak points of the answer; easily navigates within the field of knowledge and science in General; applies the knowledge gained in the study of other subjects of the curriculum.

## **Recommended literature, a list of electronic resources on exam topics**

1. Logistic. Book and workshop / Nerush Yu, A. Nerush 2016.

2. Logistics and supply chain management, M. Christopher, 2014

3. A.I. Semenenko, V.I. Sergeev, Logistics. Basic theory, M .: 2003.

4. Strategic management of logistics, Textbook / James R. Stock, Douglas M. Lambert, 2005.

5. Bowersox Donald J., Kloss David J. Logistics: an integrated supply chain / Per. from English - M .: CJSC "Olymp-Business". 2001.

6. Naimark Yu.Yu. Logistics of production processes: Monograph. / GUU.-M., 2003.-153 p.

7. Stock J.R., Lambert D.M. Strategic logistics management: trans. from English Publishing house: INFRA-M, 2008 .;

8. Chase R.B., Equiline N.J., Jacobs R.F. Production and Operations Management - M .: Publishing House "Williams, 2004.

9. Michael R. Linders, Harold E. Fearon Supply and inventory management. Logistics / Per. from English-SPb.: LLC "Polygon Publishing House" 2008.

10. Wumek J. P. Lean Manufacturing: How to Get Rid of Losses and Make Your Company Prosper. - M .: Alpina Business Books, 2004.

11. Vader M. Lean Manufacturing Tools: Mini Guide to Implementing Lean Manufacturing Techniques.- M .: Alpina Business Books, 2005.